

Title (en)  
SYSTEM AND METHOD FOR IMPROVED INFILLING OF PART INTERIORS IN OBJECTS FORMED BY ADDITIVE MANUFACTURING SYSTEMS

Title (de)  
SYSTEM UND VERFAHREN ZUR VERBESSERTEN FÜLLUNG VON INNENRÄUMEN IN OBJEKTEN, DIE DURCH SYSTEME ZUR GENERATIVEN FERTIGUNG GEFORMT WURDEN

Title (fr)  
SYSTÈME ET PROCÉDÉ PERMETTANT D'AMÉLIORER LE REMPLISSAGE D'INTÉRIEURS DE PIÈCES DANS DES OBJETS FORMÉS PAR DES SYSTÈMES DE FABRICATION ADDITIVE

Publication  
**EP 4035804 A1 20220803 (EN)**

Application  
**EP 22150402 A 20220106**

Priority  
US 202117157448 A 20210125

Abstract (en)  
A slicer in a material drop ejecting three-dimensional (3D) object printer determines the number of material drops to eject to form a perimeter in an object layer and distributes a quantization error over the layers forming the perimeter. The slicer also identifies the location for the first material drop ejected to form the perimeter using a blue noise generator.

IPC 8 full level  
**B22F 10/22** (2021.01); **B22F 10/30** (2021.01); **B22F 10/38** (2021.01); **B33Y 10/00** (2015.01); **B33Y 30/00** (2015.01); **B33Y 50/02** (2015.01); **B22F 3/115** (2006.01); **G05B 19/4099** (2006.01)

CPC (source: CN EP KR US)  
**B22D 23/003** (2013.01 - US); **B22F 10/22** (2021.01 - CN EP US); **B22F 10/30** (2021.01 - CN EP); **B22F 10/38** (2021.01 - EP); **B22F 10/85** (2021.01 - EP US); **B22F 12/00** (2021.01 - EP); **B22F 12/53** (2021.01 - US); **B22F 12/90** (2021.01 - EP); **B29C 64/112** (2017.07 - KR); **B29C 64/209** (2017.07 - KR); **B29C 64/227** (2017.07 - KR); **B29C 64/245** (2017.07 - KR); **B29C 64/393** (2017.07 - KR); **B33Y 10/00** (2014.12 - CN EP KR US); **B33Y 30/00** (2014.12 - EP KR US); **B33Y 50/02** (2014.12 - CN EP KR US); **G05B 19/4099** (2013.01 - EP); **B22F 3/115** (2013.01 - EP); **B22F 10/80** (2021.01 - EP); **B22F 12/33** (2021.01 - EP); **B22F 12/53** (2021.01 - EP); **B22F 12/57** (2021.01 - EP); **B22F 2999/00** (2013.01 - EP); **B33Y 50/00** (2014.12 - EP); **G05B 2219/49023** (2013.01 - EP)

C-Set (source: EP)  
1. **B22F 2999/00 + B22F 10/85 + B22F 12/33 + B22F 10/38**  
2. **B22F 2999/00 + B22F 2203/00 + B22F 12/33 + B22F 12/38**  
3. **B22F 2999/00 + B22F 12/48 + B22F 12/53**

Citation (search report)  
• [IA] WO 2020198038 A1 20201001 - DESKTOP METAL INC [US]  
• [A] US 2016224689 A1 20160804 - SCHWEID STUART [US]  
• [A] US 2017056967 A1 20170302 - FULOP RIC [US], et al

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 4035804 A1 20220803**; CN 114789253 A 20220726; JP 2022113647 A 20220804; KR 20220107961 A 20220802; US 11883881 B2 20240130; US 2022234110 A1 20220728

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**EP 22150402 A 20220106**; CN 202210004071 A 20220105; JP 2021215404 A 20211229; KR 20220008278 A 20220120; US 202117157448 A 20210125